

独立行政法人理化学研究所 仁科加速器研究センター 第195回 RIBF核物理セミナー RIKEN Nishina Center for Accelerator Based Science The 195<sup>th</sup> RIBF Nuclear Physics Seminar

GLOBAL - ultra-low background experiment on the Earth's surface -

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Ultra-Low background detectors are the essential in "non-accelerator" underground experiments in which the signal rates are extremely low. Such low background detectors will be also useful in recent and future high-precision measurements with use of accelerators for studies of nuclear astrophysics, fundamental symmetries, ad so on.

One of the methods to obtain low background condition in such experiment is to bring compact low-energy accelerators in to deep underground laboratories.

One the other hand, we are developing another method based on a new concept named "GLOBAL (Groundbased Low Back ground laboratory)" to realized detectors on the Earth's surface with the background rates close to those of underground detectors.

GLOBAL will provide new experimental opportunities in various fields of science by allowing one to use highestperformance accelerators and extremely high-sensitivity detectors simultaneously.

March 17(Tue.) 2015 15:30 ~ RIBF Hall (rm.201), RIBF bldg., RIKEN \* The talk will be given in English.

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